

# **3D Virtual Reality Tour in Real Estate**

A thesis submitted to the Graduate School in partial  
fulfillment of the requirements for the degree  
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By

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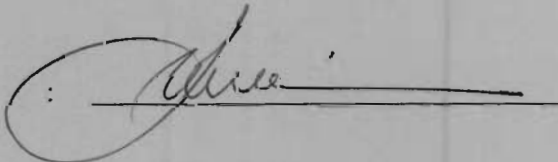
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## ABSTRAK

Tujuan utama penyelidikan ini dijalankan adalah untuk mendedahkan para pengguna dan syarikat perumahan dengan keistimewaan e-dagang sebagai strategi pemasaran yang efektif. E-dagang memainkan peranan yang penting dalam Internet. Di samping itu, penyelidikan ini juga bertujuan untuk mempromosi model rumah maya yang kemudiannya akan meningkatkan keuntungan syarikat perumahan. E-dagang merupakan saluran elektronik yang paling popular dalam Internet. Aplikasi ini akan memberi kebaikan kepada pihak syarikat perumahan dan juga pembeli. Aplikasi ini dibangunkan dengan menggunakan metodologi *Web Page Development (WPD)*. Penyelidikan ini menghuraikan beberapa pencapaian dan juga kekurangan yang dihadapi ketika pembangunan aplikasi. Sehubungan itu, beberapa cadangan ditemui demi mengatasi kekurangan ini dalam penyelidikan aplikasi e-dagang di masa depan.

## ABSTRACT

The main purpose of this research is to deliberate Virtual Reality (VR) application in E-commerce which is suitable towards real estate home builders who are increasingly driven. The Internet is widely expected to become a channel for electronic commerce and it also has an enormous potential for transforming online shopping into a real world equivalent. VR interfaces to e-commerce sites on the Internet promises to make the e-shopping experience more natural, attractive, and fun for buyers. It allows the buyers to interact with the e-commerce service through a 3D representation which supports natural actions such as walking, looking around, and picking up products from the listing. The next purpose of this research is to endorse VR home model as the best way to reduce marketing cost and increase profit. This e-commerce application would become the most powerful sales tools to come along in decades. This application has been developed using *Web Page Development (WPD)* methodology. Last but not least, this research discusses how the web site fulfills homebuyers' requirements and limitations that were discovered during the development of these applications. Therefore, some recommendations are proposed to defeat the limitations for the future research in this e-commerce application.

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## CHAPTER ONE

### INTRODUCTION

#### 1.0 Introduction

“Virtual Reality (VR) is a system which enables users to move and react in a computer-simulated environment” (Jones *et al.*, 1997). In addition virtual reality can also be defined as an artificial environment created with computer hardware and software and presented to the user in such a way that it appears and feels like a real environment (Roehl, D.J., 1996). Virtual Reality can be made by creating 3D real time interaction environments to get as close as possible to the real world. Virtual Reality is being used commonly on the Internet especially on e-Commerce web site in order to naturalize e-shopping experience and also make it more interesting for the customers. E-Commerce is a type of business model, or segments of a larger business model, that enables a firm or individual to conduct business over an electronic network, typically the internet (John, B.G., 2001). Electronic commerce operates in all four of the major market segments: business to business, business to consumer, consumer to consumer and consumer to business. One of the challenges of e-commerce is the design of web sites which effectively present products and are easy and pleasant to use by the buyers.

Virtual reality is bringing a whole new dimension to the market for real estate (Larijani, C., 1994). Buyers can view various properties online in an interactive, immersive manner. Most of what currently is called "virtual home tours" today is just a series of

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